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U. S. DEPARTMENT OF AGRICULTURE.

BUREAU OF PLANT INDUSTRY—BULLETIN No. 8.

B. T. GALLOWAY, Chief of Bureau.

A COLLECTION OF ECONOMIC AND OTHER FUNGI

PREPARED FOR DISTRIBUTION.

BY

FLORA W. PATTERSON, Mycologist,

VEGETABLE PATHOLOGICAL AND PHYSIOLOGICAL INVESTIGATIONS.

Issued February 3, 1902.

WASHINGTON:

GOVERNMENT PRINTING OFFICE.

1902.

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[1] Detailed to tobacco investigations, Bureau of Soils.
[2] Detailed to Seed and Plant Introduction.

U. S. DEPARTMENT OF AGRICULTURE.

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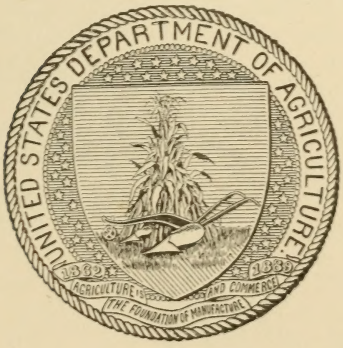
ISSUED FEBRUARY 3, 1902.



WASHINGTON:

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1902.

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LETTER OF TRANSMITTAL.

U. S. Department of Agriculture,
Bureau of Plant Industry,
Office of the Chief,
Washington, D. C., November 7, 1901.

Sir: I have the honor to transmit herewith a paper entitled A Collection of Economic and other Fungi, prepared by Mrs. Flora W. Patterson, of Vegetable Pathological and Physiological Investigations, and submitted by the Pathologist and Physiologist. It is respectfully recommended that the paper be published as Bulletin No. 8 of this Bureau.

Respectfully,

B. T. Galloway,
Chief of Bureau.

Hon. James Wilson,
Secretary of Agriculture.

PREFACE.

This Office has for some time had in contemplation a distribution of its duplicate material to the various State agricultural experiment stations, and now offers to them and other interested workers such specimens as they may select from the list which follows. It is greatly to be regretted that all species represented in this list are not in sufficient quantity to permit the distribution to be made to the experiment stations at least in uniform sets.

Each State agricultural experiment station is invited to compile its own set and to select from this list fifty specimens, which we will forward on request, but if preferred the selection will be made here. All specimens desired over fifty may be considered as in exchange. Accounts will be opened with any station so that it may avail itself at once of this material, even if it is not yet in position to send the exchanges for specimens selected in excess of the fifty furnished free. Experiment station workers will be enabled by this means to add to their reference collections with but slight expense and trouble. There are, of course, many things common in certain parts of the country which are either rare or do not occur in other parts. We would like to get all kinds of material, whether common or not. Aid is solicited toward making this exchange a success.

In establishing this exchange it is desired to extend its benefits not only to experiment station workers, but to specialists and all who are interested in the study of fungi from the economic standpoint.

The arrangement proposed is to exchange specimen for specimen when those offered are well preserved, of good quality, in abundant quantity, and authentically determined, labeled, and already placed in mycological envelopes.

In regard to exchanges for undetermined specimens and material in bulk requiring preparation for herbarium use, arrangements will be made by correspondence.

The attention of specialists is called to the desirability of having *type* specimens of at least all American species deposited in the herbarium of this Office, where they will always be accessible to those interested.

Address all correspondence to Mycological Exchange, Bureau of Plant Industry, Department of Agriculture, Washington, D. C.

ALBERT F. WOODS,
Pathologist and Physiologist.

OFFICE OF THE PATHOLOGIST AND PHYSIOLOGIST,
Washington, D. C., October 24, 1901.

A COLLECTION OF ECONOMIC AND OTHER FUNGI PREPARED FOR DISTRIBUTION.

By Flora W. Patterson, *Mycologist.*

INTRODUCTION.

An examination of this list will show the collection to be geographically very limited. It is hoped by the method now proposed to interest a large number of botanists whose collections may help ours to become more general in its nature and enable others to materially enhance the value of their herbaria at small expense. Advanced students in agricultural colleges may, under the directions of their instructors, be able to collect and contribute valuable material that will thus be made available to other workers and at the same time acquire a choice nucleus for their own herbaria. This plan will also accomplish the purpose of an exchange bureau for fungi which will be free from the awkward limitations of the usual exchange bureau. It will be easily adapted to the individual needs and circumstances of all classes interested.

Much unidentified material is at hand to be worked up which, together with what is expected to be received in response to this issue, will warrant the publication of an additional catalogue as soon as the work can be accomplished. The attempt will be made in the future, as has been with this distribution, to verify all determinations, and no effort will be spared to make the collections as authentic as published sets of exsiccati. Species have been carefully compared with their types when such were available. Duplicates of all these specimens may be examined in our herbarium.

The general arrangement and the nomenclature of the fungi are in the main that of Saccardo's Sylloge Fungorum, and the nomenclature of the hosts is from Farlow and Seymour's Host Index and Hooker and Jackson's Index Kewensis. Names marked with an asterisk (*) are from the Index Kewensis. The above works are the ones used for general reference and the arrangement of our herbarium. No attempt has been made to keep strictly up to date with the rearrangement of groups by recent monographers, as an exchange like the present may much more appropriately adhere to standard works which are probably accessible to all.

UREDINEÆ.

1. **Æcidium abundans** Pk.
   Symphoricarpus occidentalis. Nebraska.
2. **Æcidium apocyni** Schw.
   Apocynum cannabinum. Virginia.
3. **Æcidium clematidis** DC.
   a. *Clamatis ligusticifolia.* Nebraska.
   b. *Clematis virginiana.* Missouri.
4. **Æcidium compositarum** Mart.
   a. *Artemisia ludoviciana.* Montana.
   b. *Helianthus* sp. Missouri.
   c. *Prenanthes alba.* Minnesota.
   d. *Solidago* sp. District of Columbia, Missouri.
   e. *Solidago bicolor.** District of Columbia.
5. **Æcidium cressæ** DC.
   *Cressa truxillensis.** California.
6. **Æcidium euphorbiæ** Schw.
   Euphorbia preslii. Nebraska.
7. **Æcidium fraxini** Schw.
   a. *Fraxinus* sp. Massachusetts.
   b. *Fraxinus americana.* District of Columbia.
8. **Æcidium gerardiæ** Pk.
   Gerardia quercifolia. Michigan.
9. **Æcidium houstoniatum** Schw.
   *Houstonia minima.** Texas.
10. **Æcidium hydnoideum** B. & C.
    Dirca palustris. Indiana.
11. **Æcidium hypericatum** Schw.
    Ascyrum crux-andreæ. Mississippi.
12. **Æcidium impatientis** Schw.
    Impatiens pallida. Missouri; Virginia.
13. **Æcidium ludwigiæ** Ell. & Ever.
    *Ludwigia hirtella.** Mississippi.
14. **Æcidium lycopi** Gerard.
    Lycopus virginicus. Maryland.
15. **Æcidium peckii** De Toni.
    Œnothera biennis. Iowa.
16. **Æcidium pteleæ** B. & C.
    Ptelea trifoliata. Missouri.
17. **Æcidium ranunculacearum** DC.
    a. *Anemone cylindrica.* Nebraska.
    b. *Ranunculus abortivus.* Maryland.
18. **Æcidium rœstelioides** Ell. & Ever.
    Sidalcea malvaeflora. Colorado.
19. **Æcidium sambuci** Schw.
    Sambucus canadensis. Virginia.
20. **Æcidium smilacis** Schw.
    Smilax herbacea. Nebraska.
21. **Æcidium thalictri flavi** (DC.) Wint.
    Thalictrum fendleri. Colorado.
22. **Æcidium verbenæ** Speg.
    Verbena stricta. Nebraska.
23. **Æcidium xanthoxyli** Pk.
    Xanthoxylum americanum. Missouri.
24. **Calyptospora gœppertiana** Kühn.
    a. *Vaccinium ovatum.* Washington.
    b. *Vaccinium parvifolium.** Washington.
25. **Chrysomyxa albida** Kühn.
    a. *Rubus cuneifolius.** Indiana.
    b. *Rubus villosus.* Illinois, Indiana, Kansas.
26. **Chrysomyxa pirolæ** (DC.) Rostrup.
    Pirola rotundifolia. District of Columbia, Massachusetts.
27. **Coleosporium ipomœæ** (S.) Burrill.
    a. *Ipomœa* sp. Texas.
    b. *Ipomœa pandurata.* Illinois.
28. **Coleosporium pini** Galloway.
    Pinus inops. Maryland.
29. **Coleosporium sonchi-arvensis** (P.) Lév.
    a. *Aster* sp. Ohio, Vermont.
    b. *Aster cordifolius.* Indiana.
    c. *Aster foliaceus* var. *eatoni.* Montana.
    d. *Aster macrophyllus.* Michigan.
    e. *Aster novæ-angliæ.* Indiana.
    f. *Aster paniculatus.* Indiana.

29. **Coleosporium sonchi-arvensis** (P.) Lév.—Continued.
   g. Aster puniceus. Indiana.
   h. Aster sagittifolius. Illinois, Indiana, Nebraska.
   i. Aster shortii. Indiana.
   j. Aster tradescanti. Indiana.
   k. Solidago sp. District of Columbia, Illinois, Maryland.
   l. Solidago arguta. Indiana.
   m. Solidago cæsia. Indiana.
   n. Solidago canadensis. Indiana.
   o. Solidago latifolia. Indiana.
   *p. Solidago patula.** Illinois, Indiana.
   *q. Solidago pauciflosculosa.** Mississippi.
   r. Solidago rugosa. Indiana.
   s. Solidago serotina. Indiana.
   t. Vernonia fasciculata. Illinois, Missouri.
   u. Vernonia noveboracensis. Indiana.

30. **Cronartium asclepiadeum** (Willd.) Fr. var. **quercuum** Cke.
   Quercus sp. Maryland.

31. **Cronartium asclepiadeum** (Willd.) Fr. var. **thesii** Berk.
   a. Comandra pallida. Montana, Nebraska.
   b. Comandra umbellata. Illinois.

32. **Gymnosporangium bermudianum** (Farl.) Earle. I.
   Juniperus virginiana. Mississippi.

33. **Gymnosporangium clavariæforme** (Jacq.) Rees. I.
   a. Cratægus apiifolia. Indiana.
   b. Cratægus coccinea. Indiana, Michigan.
   c. Cratægus crus-galli. Indiana.
   d. Cratægus spathulata. Indiana.
   e. Cratægus tomentosa. Illinois, Michigan.
   f. Pirus coronaria. Illinois.
   g. Pirus malus. District of Columbia, Maryland, New Jersey, North Carolina.

34. **Gymnosporangium clavipes** C. & P. I.
   a. Cratægus sp. (cult.). District of Columbia.
   b. Cratægus coccinea. Mississippi.

35. **Gymnosporangium ellisii** (B.) Farl. III.
   Chamæcyparis sphæroidea. Massachusetts.

36. **Gymnosporangium globosum** Farl. III.
   Juniperus virginiana. Massachusetts.

37. **Gymnosporangium macropus** Lk. I.
   a. Pirus coronaria. Indiana.
   b. Pirus malus. New Jersey.

38. **Gymnosporangium macropus** Lk. III.
   Juniperus virginiana. District of Columbia.

39. **Gymnosporangium nidus-avis** Thaxter. I.
   Pirus malus. Indiana.

40. **Melampsora betulina** (P.) Tul.
   Betula populifolia. Massachusetts.

41. **Melampsora farinosa** (P.) Schröt.
   a. Salix sp. Arizona, Illinois, Massachusetts, Michigan, Montana, Nebraska, Virginia.
   b. Salix cordata. Montana.
   c. Salix flavescens. Washington.
   d. Salix longifolia. Montana.
   e. Salix rostrata. Montana.

42. **Melampsora hydrangeæ** (B. & C.) Farl.
   Hydrangea arborescens. District of Columbia, Illinois, Indiana, West Virginia.

43. **Melampsora lini** (P.) Desm.
   a. Linum perenne. Colorado, Montana.
   b. Linum rigidum. Montana.

44. **Melampsora populina** (Jacq.) Lév.
   a. Populus angustifolia. Montana.
   b. Populus balsamifera var. *candicans.* Indiana.

44. **Melampsora populina** (Jacq.) Lév.—Continued.
    c. Populus grandidentata. Indiana.
    d. Populus monilifera. Illinois, Indiana.
    e. Populus tremuloides. Montana.
45. **Melampsorella cerastii** (P.) Schröt.
    Cerastium arvense. Montana.
46. **Peridermium pini** Lév.
    a. Pinus sp. Georgia, Missouri.
    b. Pinus mitis. Maryland.
47. **Phragmidium potentillæ** (P.) Karst.
    a. Potentilla dissecta. Montana.
    b. Potentilla gracilis. Nebraska.
    c. Potentilla pennsylvanica. Montana.
48. **Phragmidium rubi-idæi** (P.) Wint.
    a. Rubus strigosus. Massachusetts.
    b. Rubus villosus. West Virginia.
49. **Phragmidium speciosum** Fr.
    a. Rosa sp. West Virginia.
    b. Rosa lucida. Mississippi.
50. **Phragmidium subcorticium** (Schrk.) Wint.
    a. Rosa sp. Illinois.
    b. Rosa arkansana. Montana.
    c. Rosa hemispherica. Nebraska.
    d. Rosa lucida. Illinois, Indiana.
    *e. Rosa nutkana.** Washington.
    *f. Rosa setigera.** Indiana.
51. **Puccinia aletridis** B. & C.
    Aletris farinosa. Massachusetts.
52. **Puccinia amphigena** Dietel.
    *Ammophila longifolia.** Montana.
53. **Puccinia andropogonis** Schw.
    a. Andropogon furcatus. Illinois.
    b. Andropogon hallii. Nebraska.
53. **Puccinia andropogonis** Schw.—Continued.
    c. Andropogon scoparius. Illinois, Iowa, Mississippi.
54. **Puccinia angustata** Pk.
    a. Eriophorum cyperinum. Illinois.
    b. Eriophorum virginicum. Massachusetts.
    c. Scirpus sp. West Virginia.
    d. Scirpus atrovirens. Indiana.
55. **Puccinia apocrypta** Ell. & Tracy.
    Asprella hystrix. Indiana.
56. **Puccinia argentata** (Schultz) Wint.
    a. Impatiens fulva. Indiana, Virginia.
    b. Impatiens pallida. West Virginia.
57. **Puccinia asparagi** DC.
    Asparagus officinalis. New Jersey.
58. **Puccinia asteris** Duby.
    a. Aster sp. District of Columbia, Missouri.
    b. Aster cordifolius. Indiana.
    c. Aster paniculatus. Indiana.
    d. Aster shortii. Illinois.
59. **Puccinia balsamorrhizæ** Pk.
    Balsamorrhiza sagittata. Montana.
60. **Puccinia caricis** (Schum.) Reb.
    a. Carex sp. Illinois, Indiana, Maryland, West Virginia.
    *b. Carex bullata.** Indiana.
    *c. Carex fœnea.** Indiana.
    *d. Carex lupulina.** Indiana.
    e. Carex pennsylvanica. Montana.
    *f. Carex stipata.** Montana.
    g. Carex straminea var. *sperta.* Montana.
    h. Carex straminea var. *mirabilis.* Indiana.
    *i Carex virescens.** Indiana.
    *j Carex vulpinoidea.** Michigan.
61. **Puccinia caulicola** Tracy & Gall. Unknown labiate. New Mexico.
62. **Puccinia circææ** Pers.
    Circæa lutetiana. Illinois, Indiana, Michigan.

63. **Puccinia conoclinii** Seymour.
Eupatorium sp. Illinois.
Eupatorium cœlestinum. West Virginia.

64. **Puccinia coronata** Cda.
Avena sativa. Kansas.
*Holcus lanatus.** Mississippi.

65. **Puccinia convolvuli** (P.) Cast.
Convolvulus sepium. Illinois, Michigan.
*Convolvulus spithamæus.** Minnesota.

66. **Puccinia cyperi** Arthur.
Cyperus sp. Illinois, Michigan, Texas.
*Cyperus erythrorhizos.** Michigan.

67. **Puccinia dayi** Clinton.
Steironema ciliatum. Indiana.

68. **Puccinia distichlydis** Ell. & Ever.
Distichlis maritima. Montana.

69. **Puccinia eleocharidis** Arthur.
*Eleocharis ovata.** West Virginia.

70. **Puccinia emaculata** Schw.
a. Panicum capillare. Illinois.
b. Panicum virgatum. West Virginia.
c. Triodia cuprea. Illinois, Missouri, West Virginia.

71. **Puccinia epilobii** DC.
Œnothera biennis. Maryland, New Hampshire.

72. **Puccinia flaccida** B. & Br.
Panicum crus-galli. Illinois.

73. **Puccinia fusca** (Relh.) Wint.
a. Anemone nemorosa. Massachusetts, Wisconsin.
b. Anemone patens var. *nuttalliana.* Colorado.

74. **Puccinia galii** (P.) Wint.
a. Galium aparine. Missouri.
b. Galium asprellum. Indiana, West Virginia.
c. Galium concinnum. Illinois, Indiana.
d. Galium triflorum. Nebraska.

75. **Puccinia gayophyti** Pk.
Gayophytum ramosissimum. Arizona.

76. **Puccinia gentianæ** (Str.) Lk.
Gentiana andrewsii. Michigan.

77. **Puccinia glechomatis** DC.
Lophanthus nepetoides. Illinois.

78. **Puccinia gonolobi** Rav.
*a. Gonolobus hirsutus.** Mississippi.
*b. Vincetoxicum palustre.** Mississippi.

79. **Puccinia graminis** Pers. I.
*Berberis vulgaris.** New Jersey.

80. **Puccinia graminis** Pers. II & III.
*a. Agropyrum dasystachyum.** Michigan.
b. Agrostis alba var. *vulgaris.* Illinois, West Virginia.
c. Avena sativa. Kansas.
d. Hordeum jubatum. Illinois.
e. Poa compressa. Indiana.
f. Poa pratensis. Indiana.

81. **Puccinia grindeliæ** Pk.
Grindelia sp. Colorado.

82. **Puccinia heliopsidis** Schw.
a. Heliopsis lævis. Minnesota.
*b. Heliopsis scabra.** Indiana.

83. **Puccinia heterogenea** Lagh.
Malva sp. Ecuador.

84. **Puccinia heterospora** B. & C.
Sida spinosa. Mississippi, Missouri.

85. **Puccinia hieracii** (Schum.) Mart.
a. Bidens bipinnata. California.
b. Cnicus undulatus. Montana.
c. Crepis sp. Colorado.
d. Taraxacum officinale. Illinois, Massachusetts, New Jersey.

86. **Puccinia hyptidis** (Curt.) Tracy & Earle.
Hyptis radiata. Mississippi.

87. **Puccinia hysteriiformis** Pk.
Arenaria congesta, var. *subcongesta.* Montana.

88. **Puccinia intermixta** Pk.
Iva axillaris. Montana.

89. **Puccinia Jonesii** Pk.
Musenium tenuifolium. Nebraska.

90. **Puccinia kansensis** Ell. & Barthol. *Buchlœ dactyloides.* Kansas.

91. **Puccinia kuhniæ** Schw.
Kuhnia eupatorioides. Colorado, Illinois.

92. **Puccinia lateripes** B. & Rav.
a. Ruellia ciliosa. Illinois.
b. Ruellia strepens. Illinois, Indiana.

93. **Puccinia malvacearum** Mont.
Althæa rosea. California.

94. **Puccinia malvastri** (Farl.) Pk.
Malvastrum coccineum. New Mexico.

95. **Puccinia mariæ-wilsoni** Clint.
Claytonia virginica. District of Columbia.

96. **Puccinia menthæ** Pers.
*a. Blephilia ciliata.** District of Columbia.
b. Blephilia hirsuta. Indiana, Iowa.
c. Cunila mariana. District of Columbia.
d. Mentha canadensis. Illinois, Indiana, Washington.
e. Mentha canadensis var. *glauca.* Montana.
f. Monarda sp. Illinois.
g. Monarda fistulosa. Illinois, Indiana, Nebraska.
h. Monarda punctata. Minnesota.
i. Pycnanthemum linifolium. Illinois.

97. **Puccinia mesomegala** B. & C.
*Clintonia uniflora.** Idaho.

98. **Puccinia miconiæ** Lagh.
Miconia sp. Ecuador.

99. **Puccinia microsperma** B. & C.
Lobelia syphilitica. Indiana.

100. **Puccinia nardosmii** Ell. & Ever.
Petasites palmata. Canada.

101. **Puccinia ornata** Arth. & Holw.
Rumex britannica. New Hampshire.

102. **Puccinia peckiana** Howe.
a. Rubus sp. Delaware, Missouri, New Jersey.
b. Rubus strigosus. Kansas.

102. **Puccinia peckiana** Howe—Continued.
c. Rubus villosus. District of Columbia, Kansas.

103. **Puccinia phragmitis** (Schum.) Körn.
Spartina cynosuroides. Illinois, Montana.

104. **Puccinia pimpinellæ** (Str.) Lk.
a. Chærophyllum procumbens. District of Columbia, Virginia.
b. Osmorrhiza sp. Ohio, Virginia.
c. Osmorrhiza brevistylis. Wisconsin.

105. **Puccinia poarum** Niels.
Poa pratensis. Indiana.

106. **Puccinia podophylli** Schw.
Podophyllum peltatum. District of Columbia, Indiana, Mississippi, Missouri, Pennsylvania.

107. **Puccinia polygoni-amphibii** Pers.
a. Polygonum sp. Montana.
b. Polygonum amphibium. Illinois, Virginia.
c. Polygonum hartwrightii. Illinois.
d. Polygonum virginianum. District of Columbia, Illinois, Michigan.

108. **Puccinia pruni-spinosæ** Pers.
a. Prunus sp. Kansas.
b. Prunus americana. Illinois, Kansas, West Virginia, Texas.
c. Prunus armeniaca. California.
d. Prunus hortulana. Texas.
e. Prunus persica. California, Georgia.
f. Prunus serotina. District of Columbia, Iowa.

109. **Puccinia purpurea** Cke.
Sorghum saccharatum. Texas.

110. **Puccinia rubigo-vera** (DC.) Wint.
a. Agropyrum divergens. Montana.
b. Agropyrum repens. New Jersey.

110. Puccinia rubigo-vera (DC.) Wint.—Continued.
- *c. Agropyrum tenerum.** Montana.
- *d. Avena sativa.* Indiana.
- *e. Elymus virginicus.* Illinois.
- *f. Poa* sp. Montana.
- *g. Secale cereale.* New Jersey.
- *h. Triticum vulgare.* Missouri.
- *i. Triticum vulgare* var. *Zimmerman.* Kansas.

111. Puccinia saxifragæ Schl.
- *a. Heuchera cylindrica.* Montana.
- *b. Saxifraga virginiensis.* District of Columbia.

112. Puccinia schœleriana Plow. & Magnus.
- *Carex stenolepis.** Indiana.

113. Puccinia seymeriæ Burrill.
- *a. Gerardia tenuifolia.** Illinois.
- *b. Seymeria macrophylla.* Illinois.

114. Puccinia silphii Schw.
- *Silphium perfoliatum.* Illinois, Iowa.

115. Puccinia smilacis Schw.
- *Smilax* sp. District of Columbia, Mississippi.

116. Puccinia sorghi Schw.
- *a. Zea mays.* Illinois, Michigan.
- *b. Tripsacum dactyloides.* Kansas.

117. Puccinia sporoboli. Arthur.
- *Sporobolus asper.* Mississippi.

118. Puccinia stipæ Arthur.
- *Stipa comata.* Montana.

119. Puccinia suaveolens (P.) Rostrup.
- *a. Cnicus arvensis.* New Jersey.
- *b. Cnicus lanceolatus.* Indiana.

120. Puccinia subnitens Dietel.
- *Distichlis maritima.* New Mexico, South Dakota.

121. Puccinia tanaceti DC.
- *a. Artemisia cana.* Montana, Nebraska.

121. Puccinia tanaceti DC.—Continued.
- *b. Artemisia dracunculoides.* Montana.
- *c. Artemisia tridentata.* Montana.
- *d. Helianthus* sp. District of Columbia, Illinois.
- *e. Helianthus annuus.* Idaho, Illinois, Indiana, Montana.
- *f. Helianthus divaricatus.* Indiana.
- *g. Helianthus grosse-serratus.* Illinois, Nebraska.
- *h. Helianthus lætiflorus.* Nebraska.
- *i. Helianthus petiolaris.* Montana, Nebraska.
- *j. Helianthus strumosus.* Indiana, Virginia.
- *k. Helianthus tracheliifolius.* Indiana.

122. Puccinia tanaceti DC., var. **vernoniæ** (S.) Burrill.
- *Vernonia fasciculata.* Nebraska.

123. Puccinia variolans Hark.
- *Aplopappus spinulosus.* Montana.

124. Puccinia veratri Duby.
- *Veratrum californicum.* Colorado.

125. Puccinia verbesinæ Schw.
- *a. Verbesina* sp. West Virginia.
- *b. Verbesina occidentalis.* West Virginia.

126. Puccinia violæ (Schum.) DC.
- *a. Viola* sp. Maryland.
- *b. Viola cucullata.* Indiana.
- *c. Viola striata.* Indiana.

127. Puccinia windsoriæ Schw.
- *a. Muhlenbergia* sp. Illinois.
- *b. Muhlenbergia mexicana.* Kansas.

128. Puccinia xanthii Schw.
- *a. Ambrosia trifida.* Illinois, Minnesota.
- *b. Xanthium canadense.* Indiana.
- *c. Xanthium strumarium.** Indiana, Maryland.

129. **Pucciniastrum crotonis** (Burr.) De Toni.
Croton capitatus. Missouri.

130. **Pucciniastrum epilobii** (Chaill.) Otth.
a. Epilobium sp. Montana.
b. Epilobium coloratum. Montana, Nebraska.

131. **Ravenelia cassiæcola** Atk.
*Cassia nictitans.** Mississippi.

132. **Ravenelia glandulæformis** B. & C.
Tephrosia virginiana. Illinois, West Virginia.

133. **Ravenelia opaca** (Sey. & Earle) Dietel.
Gleditschia triacanthos. Illinois.

134. **Triphragmium clavellosum** Berk.
Aralia nudicaulis. Maine.

135. **Triphragmium echinatum** Lév.
Oenanthe californica. California.

136. **Uredinopsis scolopendrii** (Fckl.) Dietel.
Onoclea sensibilis. Massachusetts.

137. **Uredo agrimoniæ** (DC.) Schröt.
a. Agrimonia eupatoria. Illinois, Indiana, Minnesota, Nebraska.
b. Agrimonia parviflora. West Virginia.

138. **Uredo cassandræ** Pk. & Clint.
Cassandra calyculata. Michigan.

139. **Uredo cherimoliæ** Lagh.
Anona cherimolia. Ecuador.

140. **Uredo fici** Cast.
Ficus carica. Mississippi.

141. **Uredo oxalidis** Lév.
Oxalis violacea. Texas.

142. **Uredo oxytropidis** (Pk.) De Toni.
Oxytropis lamberti. Montana.

143. **Uromyces andropogonis** Tracy.
Andropogon virginicus. Mississippi.

144. **Uromyces appendiculatus** (P.) Lk.
a. Phaseolus sp. Mississippi, New Jersey.
b. Phaseolus diversifolius. Indiana.
c. Phaseolus pauciflorus. Illinois, Missouri.
d. Phaseolus perennis. Indiana.
e. Phaseolus vulgaris. Illinois.

145. **Uromyces argophyllæ** Seymour.
Psoralea argophylla. North Dakota.

146. **Uromyces aristidæ** Ell. & Ever.
*Aristida oligantha.** Illinois.

147. **Uromyces caladii** (S.) Farl.
a. Arisæma dracontium. Maryland, Missouri.
b. Arisæma triphyllum. District of Columbia, Indiana, Maryland, Michigan.
c. Peltandra undulata. Michigan, Virginia.
d. Pontederia cordata. Missouri.

148. **Uromyces caryophyllinus** (Schrk.) Schröt.
*Dianthus caryophyllus.** District of Columbia.

149. **Uromyces eriogoni** Ell. & Hark.
*Eriogonum microthecum?** Montana.

150. **Uromyces euphorbiæ** C. & P.
*a. Euphorbia hypericifolia.** Illinois.
b. Euphorbia serpyllifolia. Montana.

151. **Uromyces fabæ** (P.) De By.
a. Lathyrus sp. Michigan, Minnesota, West Virginia.
b. Lathyrus polymorphus. Nebraska.

152. **Uromyces genestæ-tinctoriæ** (P.) Fckl.
Colutea arborescens. Kansas.

153. Uromyces glycyrrhizæ (Rabh.) Magnus.
Glycyrrhiza lepidota. California, Montana.

154. Uromyces graminicola Burrill.
a. Glyceria fluitans. Illinois.
b. Panicum virgatum. Illinois.

155. Uromyces hedysari-paniculati (S.) Farl.
a. Desmodium sp. District of Columbia, Illinois, Mississippi.
b. Desmodium canescens. Missouri.
c. Desmodium paniculatum. Illinois, Indiana.

156. Uromyces howei Pk.
a. Asclepias cornuti. Illinois, Indiana, West Virginia.
b. Asclepias incarnata. Iowa, West Virginia.
*c. Asclepias purpurascens.** Indiana.

157. Uromyces hyperici (S.) Curt.
*a. Hypericum canadense.** Indiana.
b. Hypericum mutilum. West Virginia.
*c. Hypericum paludosum.** Illinois.

158. Uromyces jonesii Pk.
Ranunculus alismæfolius var. *alismellus.* California.

159. Uromyces junci (Desm.) Tul.
a. Juncus effusus. West Virginia.
b. Juncus longistylis. Montana.
c. Juncus tenuis. Illinois.

160. Uromyces lespedezæ (S.) Pk.
a. Lespedeza capitata. Illinois, Michigan.
*b. Lespedeza polystachya.** Missouri, West Virginia.
c. Lespedeza repens. District of Columbia, Colorado, Illinois, Indiana.
*d. Lespedeza reticulata.** Indiana.
*e. Lespedeza stuvei.** Missouri.

160. Uromyces lespedezæ (S.) Pk.—Continued.
f. Lespedeza violacea. Mississippi, Missouri, Virginia.

161. Uromyces limonii (DC.) Lév.
Statice limonium. Mississippi.

162. Uromyces piriformis Cke.
Acorus calamus. Michigan.

163. Uromyces polygoni (P.) Fckl.
a. Polygonum sp. Illinois, Indiana, Minnesota, Missouri.
b. Polygonum acre. Illinois.
c. Polygonum aviculare. Illinois.
*d. Polygonum hydropiperoides.** Illinois.

164. Uromyces rudbeckiæ Arth. & Holw.
Rudbeckia laciniata. Illinois. Nebraska.

165. Uromyces sophoræ Pk.
Sophora sericea. Colorado.

166. Uromyces spermacoces (S.) Curt.
Diodia teres. Illinois, Missouri, Virginia.

167. Uromyces terebinthi (DC.) Wint.
Rhus toxicodendron. Indiana, Nebraska.

168. Uromyces trifolii (Hedw.) Wint.
a. Trifolium carolinianum. Texas.
*b. Trifolium medium.** Indiana.
c. Trifolium pratense. Indiana, Massachusetts, New Jersey, New York.
d. Trifolium repens. Michigan.

169. Uromyces werneriæ Lagh.
*Werneria nubigena.** Ecuador.

170. Uropyxis amorphæ (Curt.) Schröt.
a. Amorpha canescens. Illinois.
b. Amorpha fruticosa. Illinois, Mississippi.

171. **Uropyxis petalostemonis** (Farl.) De Toni.
Petalostemon candidus. Nebraska.

USTILAGINEÆ.

172. **Cerebella paspali** Cke. & Massee.
Panicum virgatum. Mississippi.

173. **Cintractia junci** (S.) Trel.
Juncus tenuis. Massachusetts.

174. **Entyloma compositarum** Farl.
a. Ambrosia trifida. District of Columbia, Missouri.
b. Lepachys pinnata. Iowa.

175. **Entyloma menispermi** Farl. & Trel.
Menispermum canadense. Illinois.

176. **Entyloma physalidis** (Kalch. & Cke.) Wint.
a. Physalis philadelphica. Indiana.
b. Physalis virginiana. Michigan.

177. **Entyloma ranunculi** (Bon.) Schröt, forma *thalictri* Farl.
Thalictrum purpurascens. Illinois.

178. **Entyloma saniculæ** Pk.
Sanicula marylandica. Iowa.

179. **Entyloma serotinum** Schröt.
*Mertensia pumonarioides?** Maryland.

180. **Graphiola phœnicis** (Moug.) Poit.
*Phœnix canariensis.** California.

181. **Sorosporium syntherismæ** (S.) Farl.
a. Cenchrus tribuloides. Illinois.
b. Panicum proliferum. Illinois.
c. Panicum sanguinale. Mississippi, Missouri.

182. **Sphacelotheca hydropiperis** (Schum.) De By.
Polygonum sagittatum. West Virginia.

183. **Urocystis agropyri** (Preuss.) Schröt.
Agropyrum repens. Massachusetts.

184. **Urocystis anemones** (P.) Schröt.
Anemone acutiloba. Iowa.

185. **Urocystis waldsteiniæ** Pk.
Waldsteinia fragarioides. New York.

186. **Ustilago austro-americana** Speg.
a. Polygonum sp. District of Columbia, Illinois, Missouri.
b. Polygonum hydropiper. District of Columbia.
c. Polygonum pennsylvanicum. Missouri.

187. **Ustilago avenæ** (P.) Jensen.
Avena sativa. Tennessee.

188. **Ustilago caricis** (P.) Fckl.
a. Carex filifolia. Montana.
b. Carex pennsylvanica. Montana.

189. **Ustilago diplospora** Ell. and Ever.
Panicum sanguinale. Mississippi.

190. **Ustilago lineata** Cke.
Zizania aquatica. Nebraska.

191. **Ustilago maydis** (DC.) Cda.
Zea Mays. Indiana.

192. **Ustilago minima** Arthur.
Stipa comata. Montana.

193. **Ustilago montaniensis** Ell. & Ever.
Muhlenbergia glomerata var. *setiformis.* Montana.

194. **Ustilago neglecta** Niessl.
a. Setaria. sp. Iowa.
b. Setaria glauca. Illinois, Massachusetts.

195. **Ustilago ornata** Tracy & Earle.
*Leptochloa mucronata.** Mississippi.

196. **Ustilago pustulata** Tracy & Earle.
Panicum proliferum. Mississippi.

197. **Ustilago rabenhorstiana** Kühn.
Panicum sanguinale. Maryland.

198. **Ustilago sorghi** (Lk.) Pass.
Sorghum vulgare. Kansas.

199. **Ustilago spermophora** B. & C.
a. Eragrostis major. Iowa.
b. Eragrostis minor. * Illinois.

200. **Ustilago tritici** (P.) Jensen.
Triticum vulgare. Michigan.

201. **Ustilago uniolæ** Ell. & Ever.
Uniola gracilis. Mississippi.

202. **Ustilago utriculosa** (Nees) Tul.
a. Polygonum sp. Illinois, Mississippi.
b. Polygonum pennsylvanicum. Illinois, Missouri, West Virginia.

203. **Tilletia corona** Scribner.
a. Leersia oryzoides. District of Columbia.
b. Leersia virginica. Illinois.
c. Panicum virgatum. Illinois.

204. **Tilletia horrida** Tak.
Oryza sativa. Japan.

PHYCOMYCETEÆ.

205. **Albugo amaranthi** (S.) Kuntze.
a. Amarantus albus. Montana.
b. Amarantus chlorostachys var. *hybridus.* Indiana.
c. Amarantus retroflexus. Indiana, Michigan.

206. **Albugo candida** (P.) Kuntze.
*a. Brassica alba.** Indiana.
b. Capsella bursa-pastoris. District of Columbia.

207. **Albugo ipomœæ-panduranæ** (S.) Swingle.
a. Ipomœa batatas. New Jersey.
b. Ipomœa pandurata Indiana, Missouri.

208. **Albugo platensis** (Speg.) Swingle.
*a. Boerhaavia erecta.** Florida.

208. **Albugo platensis** (Speg.) Swingle—Continued.
*b. Boerhaavia hirsuta?** Florida.

209. **Albugo portulacæ** (DC.) Kuntze.
Portulaca oleracea. District of Columbia.

210. **Albugo tragopogonis** (P.) S. F. Gray.
Ambrosia artemisiæfolia. New York.

211. **Bremia lactucæ** Regel.
a. Lactuca sp. Illinois, Maryland, West Virginia.
*b. Lactuca integrifolia.** Maryland.
c. Lactuca leucophæa. Maryland.
d. Lactuca sativa. Maryland.

212. **Peronospora alta** Fckl.
Plantago sp. Indiana.

213. **Peronospora arthuri** Farl.
Oenothera biennis. Maryland, Massachusetts.

214. **Peronospora calotheca** De By.
Galium triflorum. Wisconsin.

215. **Peronospora corydalis** De By.
*Corydalis glauca.** Massachusetts.

216. **Peronospora effusa** (Grev.) Rabh.
a. Chenopodium album. Indiana.
b. Spinacea oleracea. Rhode Island.

217. **Peronospora ficariæ** Tul.
Ranunculus acris. Massachusetts.

218. **Peronospora lamii** A. Braun.
*Lamium amplexicaule.** Virginia.

219. **Peronospora myosotidis** De By.
Myosotis verna. Michigan.

220. **Peronospora obovata** Bon.
Spergula arvensis. Maine

221. **Peronospora parasitica** (P.) Tul.
a. Dentaria laciniata. District of Columbia, Maryland.
b. Lepidium virginicum. New Jersey.

222. **Peronospora potentillæ** De By.
Potentilla norvegica. Maryland.

223. **Peronospora rubi** Rabh.
a. Rubus sp. Maryland.
b. Rubus canadensis. Maryland.

224. **Peronospora rumicis** Cda.
Polygonum dumetorum var. *scandens.* Indiana.

225. **Peronospora sordida** Berk.
Scrophularia nodosa. Illinois.

226. **Peronospora viciæ** (B.) De By.
Vicia sativa. Virginia.

227. **Peronospora violæ** De By.
Viola tricolor var. *arvensis.* Illinois.

228. **Phytopthora infestans** (Mont.) De By.
Solanum tuberosum. New Jersey, New York, Vermont.

229. **Plasmopara australis** (Speg.) Swingle.
Sicyos angulatus. Indiana.

230. **Plasmopara cubensis** (B. & C.) Humph.
a. Cucumis sp. Texas.
b. Cucumis sativus. Maryland.

231. **Plasmopara entospora** (R. & C.) Schröt.
Aster novæ-angliæ. Maryland.

232. **Plasmopara geranii** (Pk.) Berl. & De Toni.
a. Geranium carolinianum. Indiana, Missouri, New Jersey.
b. Geranium maculatum. District of Columbia.

233. **Plasmopara halstedii** (Farl.) Berl. & De Toni.
a. Bidens connata. Indiana.
b. Bidens frondosa. Indiana.

234. **Plasmopara obducens** Schröt.
Impatiens sp. Michigan.

235. **Plasmopara pygmæa** (Ung.) Schröt.
Anemone dichotoma. Michigan.

236. **Plasmopara ribicola** Schröt.
Ribes divaricatum. Washington.

237. **Plasmopara viburni** Pk.
Viburnum opulus. Maryland.

238. **Plasmopara viticola** (B. & C.) Berl. & De Toni.
a. Vitis sp. Illinois, Indiana, Massachusetts, Ohio.
b. Vitis sp., cult. var. *Mœnch.* Mississippi.
c. Vitis æstivalis. Illinois.
d. Vitis cordifolia. Indiana.

239. **Sclerospora graminicola** (Sacc.) Schröt.
a. Setaria italica. Michigan.
b. Setaria viridis. Iowa.

240. **Synchytrium decipiens** Farl.
a. Amphicarpæa sp. Minnesota.
b. Amphicarpæa monoica. Indiana.
c. Apios tuberosa. Missouri.

241. **Synchytrium papillatum** Farl.
Erodium cicutarium. California.

242. **Synchytrium pluriannulatum** (Hark.) Farl.
Sanicula marylandica. Michigan.

PYRENOMYCETEÆ.

243. **Asterina inquinans** Ell. & Ever.
Sabal adansonii. Mississippi.

244. **Asterina pelliculosa** Berk.
Ilex lucida. Florida.

245. **Claviceps purpurea** (Fr.) Tul.
a. Agropyrum sp. South Dakota.
b. Elymus virginicus. Illinois.
c. Phalaris arundinacea. New York.
d. Spartina stricta. California.

246. **Didymella culmigena** Sacc.
Muhlenbergia sp. Mississippi.

247. **Epichloe typhina** (P.) Tul.
Glyceria nervata. Missouri.

248. **Erysiphe cichoracearum** DC.
a. Achillea millefolium. Montana.

248. Erysiphe cichoracearum DC.—Continued.

b. Actinomeris squarrosa. Illinois, Indiana, Maryland.
c. Ambrosia artemisiæfolia. Indiana.
d. Ambrosia trifida. Indiana.
e. Artemisia ludoviciana. Montana.
f. Aster sp. District of Columbia, Ohio.
g. Aster communis. Montana.
h. Aster cordifolius. Indiana.
i. Aster longifolius. Montana.
j. Aster paniculatus. Indiana.
k. Aster puniceus. Indiana.
l. Bigelovia graveolens var. *albicaulis.* Montana.
m. Cnicus altissimus. Indiana.
n. Eupatorium purpureum. Indiana.
o. Helianthus decapetalus. Indiana.
p. Helianthus tuberosus. Indiana.
q. Helianthus tuberosus var. *subcanescens.* Indiana.
r. Parietaria pennsylvanica. Indiana.
s. Phlox sp. District of Columbia.
t. Phlox paniculata. Indiana.
u. Solidago canadensis. Indiana.
v. Verbena hastata. Illinois.
w. Verbena stricta. Illinois, Indiana.
x. Vernonia fasciculata. Illinois.
y. Vernonia noveboracensis. Indiana.
*z. Xanthium strumarium.** District of Columbia, Indiana, Maryland, Missouri.

249. Erysiphe communis (Wallr.) Fr.

a. Amphicarpæa monoica. Illinois, Indiana.
b. Apios tuberosa. Indiana.
c. Clematis virginiana. Indiana.

249. Erysiphe communis (Wallr.) Fr.—Continued.

d. Cuphæa viscoscissima. Maryland.
e. Geranium maculatum. Indiana.
f. Lupinus perennis. Illinois, Michigan.
g. Ranunculus abortivus. Indiana.
h. Thermopsis montana. Colorado.

250. Erysiphe galeopsidis DC.

a. Stachys aspera. Indiana.
b. Stachys ciliata var. *pubens.* Washington.

251. Erysiphe graminis DC.

a. Agropyrum sp. Montana.
b. Agropyrum glaucum. Montana.
c. Poa tenuifolia. Montana.

252. Erysiphe trina Hark.

Quercus agrifolia. California.

253. Gnomonia ulmea Thüm.

Ulmus americana. Canada.

254. Gnomoniella coryli (Batsch.) Sacc.

Corylus rostrata. Washington.

255. Gnomoniella fimbriata (P.) Sacc.

Carpinus caroliniana. West Virginia.

256. Hypomyces lactifluorum (Schw.) Tul.

Lactarius sp. New Jersey.

257. Læstadia bidwellii (Ell.) Viala & Ravaz.

a. Ampelopsis quinquefolia. District of Columbia, Illinois.
b. Vitis sp. District of Columbia, Illinois, Maryland, North Carolina, Ohio.
c. Vitis cordifolia. Illinois, Indiana.
d. Vitis vinifera var. *Mission.* Texas.

258. Læstadia illicicola Tracy & Earle.

*Illicium floridanum.** Mississippi.

259. **Lembosia angustiformis** Tracy & Earle.
Ilex coriacea. Mississippi.

260. **Leptosphæria obtusispora** Speg.
Yucca sp. Mississippi.

261. **Meliola cameliæ** (Catt.) Sacc.
Citrus aurantium. Florida.

262. **Meliola palmicola** Wint.
Sabal serrulata. Florida.

263. **Microsphæra alni** (DC.) Wint.
a. Alnus serrulata. Maryland.
b. Carya sulcata. Indiana.
c. Castanea sativa. West Virginia.
d. Ceanothus americanus. Illinois, New York.
e. Corylus americana. Illinois.
f. Fagus ferruginea. Indiana, New York.
g. Juglans nigra. Indiana.
h. Lonicera oblongifolia. Ohio.
i. Lonicera perfoliata. Iowa.
j. Platanus occidentalis. District of Columbia, Indiana.
k. Virbunum dentatum. Indiana.
l. Virbunum lentago. Iowa.
m. Virburnum prunifolium. Indiana.

264. **Microsphæra diffusa** C. & P.
a. Desmodium sp. District of Columbia, Illinois.
b. Desmodium canadense. Illinois, Iowa.
c. Desmodium canescens. Maryland.
d. Lespedeza capitata Illinois.

265. **Microsphæra elevata** Burrill.
Catalpa sp. District of Columbia.

266. **Microsphæra erineophila** Pk.
a. Fagus sp. District of Columbia.
b. Fagus ferruginea. District of Columbia, Illinois.

267. **Microsphæra euphorbiæ** B. & C.
Euphorbia corollata. Illinois, Maryland.

268. **Microsphæra grossulariæ** Lév.
a. Sambucus sp. Ohio.
b. Sambucus canadensis. New York.

269. **Microsphæra quercina** (S.) Burrill.
a. Quercus sp. Iowa, Michigan, West Virginia.
b. Quercus bicolor.
c. Quercus bicolor × *macrocarpa.* Indiana.
d. Quercus bicolor×*michauxii.* Indiana.
e. Quercus coccinea. District of Columbia, Virginia.
f. Quercus lyrata. Indiana.
g. Quercus macrocarpa. Indiana.
h. Quercus palustris. Illinois.
i. Quercus prinoides. Kansas.
j. Quercus prinus. Indiana.
k. Quercus rubra. Illinois, Indiana.

270. **Microsphæra ravenelii** Berk.
a. Gleditschia triacanthos. Indiana, Mississippi.
b. Vicia americana, var. *linearis.* Montana.

271. **Microsphæra russellii** Clint.
Oxalis corniculata var. *stricta.* Illinois.

272. **Microsphæra semitosta** B. & C.
Cephalanthus occidentalis. Indiana.

273. **Microsphæra symphoricarpi** Howe.
a. Symphoricarpus sp. Missouri.
b. Symphoricarpus vulgaris. Missouri.

274. **Microsphæra syringæ** (S.) Magnus.
Syringa vulgaris. District of Columbia, Illinois, Indiana.

275. **Microsphæra vaccinii** C. & P.
a. Vaccinium sp. District of Columbia.
b. Vaccinium canadense. Illinois.

276. **Montagnella heliopisdis** (S.) Sacc.
Heliopsis ? hirsuta. Mississippi.

277. **Ophiobolus anguillides** (Cke.) Sacc.
Ambrosia artemisiæfolia. Mississippi.

278. **Parodiella perisporioides** (B. & C.) Speg.
Rhynchosia tomentosa var. *erecta.* Mississippi.

279. **Phyllachora flabella** (S.) Thüm.
Pteris aquilina. West Virginia.

280. **Phyllachora graminis** (P.) Fckl.
a. Andropogon furcatus. Illinois.
b. Distichlis maritima. New Mexico.
c. Elymus sp. Illinois.
d. Elymus canadensis. Indiana, West Virginia.
e. Elymus virginicus. Virginia.
f. Muhlenbergia mexicana. Indiana, Michigan.
g. Sporobolus cuspidatus. Minnesota.
h. Sporobolus depauperatus. Montana.

281. **Phyllactinia suffulta** (Reb.) Sacc.
a. Alnus rubra. Washington.
b. Carpinus caroliniana. Indiana.
c. Celastrus scandens. Indiana.
d. Cephalanthus occidentalis. Indiana.
*e. Cornus nuttallii.** Washington.
f. Cornus stolonifera. Montana, New York.
g. Corylus americana. Illinois, Indiana.
h. Cratægus coccinea. New York.
i. Cratægus tomentosa. Illinois.
j. Fraxinus sp. Illinois.
k. Fraxinus americana. Indiana.
l. Fraxinus pubescens. Indiana, Michigan.

281. **Phyllactinia suffulta** (Reb.) Sacc.—Continued.
*m. Fraxinus quadrangulata.** Indiana.
n. Fraxinus sambucifolia. Indiana, Michigan.
o. Liriodendron tulipifera. Indiana.
p. Ostrya virginica. Indiana, Illinois.
q. Quercus coccinea. Indiana.
r. Quercus palustris. Indiana.
s. Vaccinium stamineum. West Virginia.

282. **Physalospora arthuriana** Sacc.
Baccharis sp. Mississippi.

283. **Physalospora aurantia** Ell. & Ever.
Astragalus pectinatus. Montana.

284. **Plowrightia morbosa** (S.) Sacc.
a. Prunus sp. Maryland, West Virginia.
b. Prunus americana. Maryland.

285. **Plowrightia symphoricarpi** Ell. & Ever.
Symphoricarpus occidentalis. Montana.

286. **Podosphæra biuncinata** C. & P.
Hamamelis virginiana. Illinois.

287. **Podosphæra oxyacanthæ** (DC.) De By.
a. Cratægus coccinea. Michigan.
b. Cratægus crus-galli. Indiana.
*c. Cratægus spathulata.** Indiana.
d. Cydonia vulgaris. Indiana.
e. Prunus americana. Indiana.
f. Prunus cerasus. Indiana, New York.

288. **Scorias spongiosa** (S.) Fr.
Alnus sp. Maryland.

289. **Sphærella andromedæ** Tracy & Earle.
Andromeda nitida. Mississippi.

290. **Sphærella annulata** Cke.
Magnolia glauca. Mississippi.

291. **Sphærella fragariæ** (Tul.) Sacc.
a. Fragaria sp. District of Columbia, Indiana.
*b. Fragaria elatior.** Indiana.

292. **Sphærella fraxinicola** (S.) Cke.
Fraxinus americana. Indiana.

293. **Sphærella quadrangulata** Ell. & Ever.
*Fraxinus quadrangulata.** Missouri.

294. **Sphærotheca castagnei** Lév.
a. Bidens chrysanthemoides. Indiana.
b. Bidens connata. Indiana.
c. Bidens frondosa. Illinois, Indiana.
d. Brunella vulgaris. Indiana.
e. Erechtites hieracifolia. Indiana.
f. Gerardia sp. District of Columbia.
g. Pedicularis canadensis. Michigan.
*h. Pedicularis lanceolata.** Indiana.
i. Veronica virginica. Illinois.

295. **Sphærotheca humuli** (DC.) Burrill.
a. Agrimonia eupatoria. Indiana.
b. Geum album. Indiana.
c. Gilia linearis. Montana, North Dakota.

296. **Sphærotheca lanestris** Hark.
Quercus prinus. Mississippi.

297. **Sphærotheca mors-uvæ** (S.) B. & C.
a. Ribes sp. New York.
b. Ribes floridum. Nebraska.

298. **Sphærotheca pannosa** (Wallr.) Lév.
a. Rosa lucida. Indiana.
*b. Rubus spectabilis.** Washington.

299. **Sphærotheca phytoptophila** Kell. & Swingle.
a. Celtis occidentalis. Kansas, Missouri.

300. **Uncinula circinata** C. & P.
a. Acer rubrum. Indiana.
b. Acer saccharinum. Indiana.
c. Acer saccharinum var. *nigrum.* Indiana.

301. **Uncinula clintonii** Pk.
Tilia americana. Illinois, Indiana, Michigan.

302. **Uncinula flexuosa** Pk.
Æsculus glabra. Indiana.

303. **Uncinula geniculata** Gerard.
Morus rubra. Indiana, Kansas.

304. **Uncinula macrospora** Pk.
a. Ulmus americana. Iowa, Mississippi.
b. Ulmus fulva. Indiana.

305. **Uncinula necator** (S.) Burrill.
a. Ampelopsis quinquefolia. District of Columbia, Indiana.
b. Vitis sp. (cult.). District of Columbia, Illinois, Indiana, Maine.
c. Vitis vinifera. California.

306. **Uncinula parvula** C. & P.
Celtis occidentalis. Illinois, Indiana.

307. **Uncinula polychæta** (B. & C.) Tracy & Gall.
*Celtis mississippiensis.** Mississippi.

308. **Uncinula salicis** (DC.) Wint.
a. Populus tremuloides. Iowa, Montana.
b. Salix sp. Illinois, Massachusetts, Michigan, Minnesota.
c. Salix caprea var. *pendula.* New York.
d. Salix flavescens. Washington.
e. Salix flavescens var. *scouleriana.* Montana.
f. Salix nigra. Indiana.
g. Salix sericea. Indiana.

309. **Thielavia basicola** Zopf.
Viola sp. Maryland.

310. **Trabutia quercina** (Fr. & Rud.) Sacc. & Roum.
Quercus virens. Mississippi.

311. **Valsa nivea** (Hoffm.) Fr.
Populus tremuloides. Montana.

312. **Winteria lobata** Tracy & Earle.
Ilex lucida. Mississippi.

DISCOMYCETEÆ.

313. **Dermatea carnea** (Cke. & Ell.) Unrecognized bark. Maryland.

314. **Exoascus deformans** (Berk.) Fckl.
Prunus persica. Georgia, New Jersey.

315. **Niptera ellisii** Rehm.
*Ammophila longifolia.** Montana.

316. **Pseudopeziza trifolii** Fckl.
Trifolium pratense. Washington.

317. **Rhytisma acerinum** (P.) Fr.
a. Acer dasycarpum. Illinois, New Jersey, Virginia, West Virginia.
b. Acer rubrum. West Virginia.

318. **Rhytisma andromedæ** (P.) Fr.
Andromeda polifolia. Michigan.

319. **Rhytisma punctatum** (P.) Fr.
a. Acer sp. West Virginia.
b. Acer macrophyllum. Washington.

320. **Rhytisma solidaginis** Schw.
Solidago lanceolata. Vermont.

321. **Rhytisma vaccinii** Fr.
Vaccinium sp. West Virginia.

322. **Stictis arundinacea** Pers.
Andropogon sp. Mississippi.

323. **Taphrina aurea** (P.) Fr.
Populus balsamifera. Iowa.

324. **Taphrina cærulescens** (Mont. & Desm.) Tul.
a. Quercus sp. Florida, Georgia.
b. Quercus nigra. Georgia.
c. Quercus tinctoria. Massachusetts.

325. **Taphrina ulmi** (Fckl.) Johans.
*Ulmus campestris.** Texas.

326. **Taphrina virginica** Sadeb. & Seymour.
Ostrya virginica. Massachusetts.

SPHÆROPSIDEÆ.

327. **Actinonema rosæ** (Lib.) Fr.
Rosa sp. District of Columbia, Missouri, New Jersey.

228. **Ascochyta paulowniæ** Sacc. & Brun.
Paulownia imperialis. District of Columbia.

329. **Asteroma liriodendri** Cke.
Liriodendron tulipifera. District of Columbia.

330. **Cicinnobolus cesatii** De By.
a. Aster shortii. Indiana.
b. Hydrophyllum virginicum. Indiana.
c. Rudbeckia triloba. Indiana.
d. Solidago arguta. Indiana.
e. Solidago canadensis var. *procera.* Indiana.
f. Solidago latifolia. Indiana.
g. Taraxacum officinale. Indiana.

331. **Coniothyrium concentricum** (Desm.) Sacc.
a. Yucca sp. North Carolina.
b. Yucca angustifolia. District of Columbia, Missouri.

332. **Coniothyrium diplodiella** (Speg.) Sacc.
Vitis sp. var. *nigra.* South Carolina.

333. **Darluca filum** (Biv.) Cast.
a. Calamintha clinopodium. West Virginia.
b. Carex sp. Indiana.
c. Potentilla canadensis. Ohio.
d. Salix sp. Maryland, West Virginia.

334. **Diplodia hesperidica** Speg.
Citrus aurantium. Mississippi.

335. Discosia rugulosa B. & C.
Carya alba. Illinois.

336. Entomosporium maculatum Lév.
a. Cydonia sp. Delaware, New York.
b. Cydonia vulgaris. Michigan, New Jersey.
c. Pirus communis. Georgia, New York, Texas.
d. Pirus malus. New York.
*e. Pirus sinensis.** New Jersey.

337. Hendersonia mali Thüm.
Pirus malus. Illinois.

338. Kellermania yuccægena Ell. & Ever.
Yucca sp. Mississippi.

339. Melasmia gleditschiæ Ell. & Ever.
Gleditschia triacanthos. Kansas.

340. Phleospora aceris (Lib.) Sacc.
a. Acer dasycarpum. Illinois, Kansas, Michigan, Minnesota, Missouri.
b. Acer rubrum. Indiana.

341. Phleospora anemones Ell. & Kell.
Anemone virginiana. Massachusetts.

342. Phleospora mori (Lév.) Sacc.
Morus rubra. District of Columbia.

343. Phleospora ulmi (Fr.) Wallr.
a. Ulmus sp. Michigan.
b. Ulmus americana. District of Columbia, Illinois.
c. Ulmus fulva. District of Columbia, Illinois, Indiana, Kansas.

344. Phoma maculans (B. & C.)Sacc.
Bumelia sp. Mississippi.

Phoma uvicola B. & C.
See **Læstadia bidwellii** (Ell.) Viala & Ravaz.

345. Phoma virginiana Ell. & Halsted.
Prunus virginiana. Illinois.

346. Phyllosticta acericola C. & E.
a. Acer dasycarpum. Missouri, New Jersey.
*b. Acer platanoides** New Jersey.
c. Acer rubrum. Maine, Virginia.

347. Phyllosticta æsculi Ell. & Mart.
a. Æsculus sp. District of Columbia.
b. Æsculus glabra. Missouri.
c. Æsculus hippocastanum. District of Columbia, Maryland.

Phyllosticta ampelopsidis Ell. & Mart.
See **Læstadia bidwellii** (Ell.) Viala & Ravaz.

348. Phyllosticta asiminæ Ell. & Kell.
Asimina triloba. District of Columbia, Indiana, Maryland, Missouri.

349. Phyllosticta catalpæ Ell. & Mart.
Catalpa bignonioides. District of Columbia.

350. Phyllosticta celtidis Ell. & Kell.
Celtis occidentalis. Indiana.

351. Phyllosticta circumscissa Cke.
a. Prunus americana. Illinois.
b. Prunus persica. Washington.

352. Phyllosticta cornicola (DC.) Rabh.
Cornus florida. District of Columbia.

353. Phyllosticta destruens Desm.
Prunus americana. Kansas.

354. Phyllosticta eriobotryæ Thüm.
Photinia japonica. Louisiana.

355. Phyllosticta eupatorina Thüm.
Eupatorium purpureum. Illinois.

356. Phyllosticta gossypina Ell. & Mart.
Gossypium herbaceum. North Carolina.

357. **Phyllosticta liriodendrica** Sacc.
Liriodendron tulipifera. West Virginia.

358. **Phyllosticta minutissima** Ell. & Ever.
Acer glabrum. Nebraska.

359. **Phyllosticta paulowniæ** Sacc.
Paulownia imperialis. District of Columbia.

360. **Phyllosticta pirina** Sacc.
Pirus malus. District of Columbia, Maryland, Missouri, New Jersey, West Virginia.

361. **Phyllosticta sassafras** Cke.
Sassafras officinale. Illinois, Missouri.

362. **Phyllosticta spnæropsoidea** Ell. & Ever.
Æsculus hippocastanum. New Jersey.

363. **Piggotia fraxini** B. & C.
a. Fraxinus sp. Missouri.
b. Fraxinus americana. Mississippi.

364. **Septoria acicola** (Thüm.) Sacc.
Pinus sp. Missouri.

365. **Septoria æsculi** (Lib.) West.
Æsculus glabra. Indiana.

366. **Septoria agrimoniæ-eupatoriæ** Bomm. & Rouss.
Agrimonia eupatoria. Missouri.

367. **Septoria ampelina** B. & C.
a. Vitis sp. var. *Duchess.* Kansas.
b. Vitis sp. var. *Herbert.* Kansas.

368. **Septoria asclepiadicola** Ell. & Ever.
Asclepias incarnata. Indiana.

369. **Septoria atropurpurea** Pk.
Aster cordifolius. District of Columbia.

370. **Septoria aurea** Ell. & Ever.
Ribes aureum. Kansas.

371. **Septoria calcaliæ** Ell. & Kell.
Cacalia atriplicifolia. Missouri.

372. **Septoria campanulæ** (Lév.) Sacc.
Campanula americana. Iowa.

373. **Septoria cannabina** West.
Cannabis sativa. Illinois.

374. **Septoria conspicua** Ell. & Mart.
Steironema ciliatum. Indiana.

375. **Septoria cornicola** Desm.
Cornus florida. District of Columbia.

376. **Septoria erigerontia** Pk.
Erigeron annuus. Illinois.

377. **Septoria graminum** Desm.
a Triticum vulgare. Maryland.
b. Triticum vulgare var. *Zimmerman.* Kansas.

378. **Septoria kalmiæcola** (S.) B. & C.
Kalmia latifolia. District of Columbia.

379. **Septoria lactucæ** Pass.
Lactuca sativa. Indiana.

380. **Septoria lobeliæ** Pk.
Lobelia syphilitica. Illinois.

381. **Septoria mimuli** Ell. & Kell.
Mimulus alatus. Illinois.

382. **Septoria nolitangeris** Gerard.
Impatiens sp. Massachusetts.

383. **Septoria œnotheræ** West.
a. Oenothera biennis. District of Columbia, Illinois, Iowa, Maryland, Missouri.
b. Oenothera sinuata. Mississippi.

384. **Septoria phlogis** Sacc. & Speg.
Phlox perennis. Canada.

385. **Septoria physostegiæ** Ell. & Ever.
Physostegia virginica. Illinois.

386. **Septoria pileæ** Thüm.
Pilea pumila. Iowa.

387. **Septoria polygonorum** Desm.
Polygonum pennsylvanicum. Illinois.

388. **Septoria psilostega** Ell. & Mart.
Galium circæzans. Indiana.

389. **Septoria rhoina** B. & C.
Rhus typhina. Iowa.

390. **Septoria rubi** West.
a. Rubus sp. New Jersey.
b. Rubus canadensis. Maryland, New Jersey.
c. Rubus villosus. Texas.

391. **Septoria saccharina** Ell. & Ever.
Acer saccharinum. Vermont.

392. **Septoria sambucina** Pk.
Sambucus canadensis. Michigan.

393. **Septoria scrophulariæ** Pk.
Scrophularia nodosa. Minnesota, Missouri.

394. **Septoria smilacina** Ell. & Mart.
*Smilacina racemosa.** Minnesota.

395. **Septoria specularіæ** B. & C.
Specularia leptocarpa. Montana.

396. **Septoria trillii** Pk.
*Trillium sessile.** Missouri.

397. **Septoria verbenæ** Rob.
Verbena hastata. Illinois.

398. **Septoria violæ** West.
a. Viola sp. New Jersey.
b. Viola blanda. New Jersey.

399. **Septoria wilsoni** Clinton.
Chelone glabra. Ohio.

400. **Vermicularia albomaculata** Schw.
Liriodendron tulipifera. District of Columbia.

401. **Vermicularia stachydis** Tracy & Earle.
*Stachys affinis.** Missouri.

MELANCONIEÆ.

402. **Colletotrichum glœosporioides** Penzig var. *hederæ* Passer.
Hedera helix. District of Columbia.

403. **Colletotrichum lagenarum** Ell. & Halsted.
Cucumis sativus. New Jersey.

404. **Colletotrichum lineola** Cda.
Sorghum vulgare. Missouri.

405. **Colletotrichum pisi** Pat.
Pisum sativum. Ecuador.

406. **Cylindrosporium clematidis,** Ell. & Ever. var. **jackmanni** Ell. & Ever.
*Clematis jackmanni.** New York.

407. **Cylindrosporium fraxini** (Ell. & Kell.) Ell. & Ever.
a. Fraxinus americana. Maryland.
b. Fraxinus viridis. Maryland.

408. **Cylindrosporium humuli** Ell. & Ever.
Humulus lupulus. Michigan.

409. **Cylindrosporium padi** Karst.
a. Prunus sp. Maryland.
b. Prunus cerasus. Nebraska.
c. Prunus domestica. Michigan.
d. Prunus domestica var. *Farleigh damson.* New York.
e. Prunus domestica var. *Fellenberg.* New York.
f. Prunus domestica var. *Field plum.* New York.
g. Prunus serotina. West Virginia.
h. Prunus virginiana. Michigan.

410. **Cylindrosporium rubi** Ell. & Morg.
Rubus sp. Missouri.

411. **Glœosporium ampelophagum** (Pass.) Sacc.
Vitis sp. Maryland, New York, Virginia.

412. **Glœosporium apocyni** (Pk.) Ell. & Ever.
Apocynum cannabinum. Indiana.

413. **Glœosporium betularum** Ell. & Mart.
Betula nigra. District of Columbia.

414. **Glœosporium canadense** Ell. & Ever.
Quercus alba. Canada, Connecticut.

415. **Glœosporium celtidis** Ell. & Ever.
Celtis occidentalis. Canada.

416. **Glœosporium equiseti** Ell. & Ever.
Equisetum sp. Illinois.

417. **Glœosporium nervisequum** (Fckl.) Sacc.
Platanus occidentalis. District of Columbia, Missouri.

418. **Glœosporium ochroleucum** Ell. & Ever.
Castanea sativa var. *americana.* Virginia.

419. **Glœosporium phegopteridis** Frank.
Aspidium thelypteris. Massachusetts.

420. **Glœosporium septorioides** Sacc.
Quercus sp. Indiana.

421. **Glœosporium venetum** Speg.
a. Rubus sp. Missouri.
*b. Rubus idæus** var. *Gregg.* Ohio.
c. Rubus idæus var *Shaffer.* New York.
d. Rubus idæus var. *Souhegan.* Ohio.

422. **Marsonia juglandis** (Lib.) Sacc.
a. Juglans cinerea. Illinois, Ohio.
b. Juglans nigra. Michigan.

423. **Marsonia martini** Sacc. & Ell.
a. Quercus sp. Illinois.
b. Quercus alba. District of Columbia, Indiana.
c. Quercus bicolor. Indiana.
d. Quercus prinus. Indiana.
e. Quercus rubra. Indiana.

424. **Marsonia potentillæ** (Desm.) Fisch.
Fragaria sp. Montana.

425. **Marsonia quercus** Pk.
a. Quercus alba. Missouri.
b. Quercus prinus. Missouri.

426. **Pestalozzia funerea** Desm.
Smilax laurifolia. Mississippi.

HYPHOMYCETEÆ.

427. **Alternaria solani** (E. & M.) Sor.
Solanum tuberosum. Missouri, Vermont.

428. **Arthrobotrys rosea** Massee.
Avena sativa. District of Columbia.

429. **Botrytis hypophylla** Ell. & Kell.
Polygonum hydropiper. Missouri.

430. **Botrytis vulgaris** Fr.
Lactuca sativa. District of Columbia.

431. **Ceratophorum uncinatum** (C. & P.) Sacc.
a. Carya amara. Kansas.
b. Quercus macrocarpa. Indiana.

432. **Cercospora acalyphæ** Pk.
Acalypha virginica. North Carolina.

433. **Cercospora ampelopsidis** Pk.
Ampelopsis quinquefolia. Indiana, Minnesota, West Virginia.

434. **Cercospora apii** Fres.
a. Apium graveolens. Maryland, Michigan, Missouri.
b. Daucus carota. Maryland, New Jersey.

435. **Cercospora apii** Fres. var. *pastinacæ* Farl.
Pastinaca sativa. New Jersey.

436. **Cercospora atromaculans** Ell. & Ever.
Aralia spinosa. West Virginia.

437. **Cercospora beticola** Sacc.
Beta vulgaris. Illinois, Michigan.

438. **Cercospora brunkii** Ell. & Gal.
a. Geranium sp. Texas.
*b. Pelargonium peltatum.** Texas.

439. **Cercospora canescens** Ell. & Mart.
a. Phaseolus sp. Illinois.
b. Phaseolus lunatus var. *Dreer's Improved.* Kansas.
c. Phaseolus lunatus var. *New Challenge.* Kansas.

440. **Cercospora caulicola** Wint.
Asparagus officinalis. Maryland.

441. **Cercospora caulophylli** Pk.
Anemonella thalictroides. Missouri.

442. **Cercospora cercidicola** Ell.
Cercis canadensis. District of Columbia, Illinois, Indiana.

443. **Cercospora circumscissa** Sacc.
a. Prunus sp. District of Columbia, Illinois, Texas.
b. Prunus cerasus. Ohio, New Jersey.
c. Prunus serotina. Illinois, West Virginia.

444. **Cercospora clavata** (Ger.) Pk.
a. Asclepias cornuti. Michigan.
b. Asclepias incarnata. Illinois, Indiana, West Virginia.

445. **Cercospora coffeicola** B. & C.
*Coffea arabica.** Hawaii.

446. **Cercospora desmodii** Ell. & Kell.
a. Desmodium acuminatum. Illinois.
b. Desmodium rotundifolium. District of Columbia.

447. **Cercospora diodiæ** Cke.
Diodia teres. District of Columbia.

448. **Cercospora dubia** (Riess) Wint.
a. Chenopodium album. District of Columbia, Illinois, Indiana.
b. Spinacea oleracea. Missouri.

449. **Cercospora effusa** (B. & C.) Ell. & Ever.
Lobelia syphilitica. West Virginia.

450. **Cercospora erythrogena** Atk.
Rhexia mariana. Mississippi.

451. **Cercospora evonymi** Ell.
Evonymus atropurpureus. Illinois.

452. **Cercospora ferruginea** Fckl.
Ambrosia trifida. Illinois.

453. **Cercospora flagellaris** Ell. & Mart.
Phytolacca decandra. Illinois.

454. **Cercospora flexuosa** Tracy & Earle.
Diospyros virginiana. Mississippi.

455. **Cercospora fusco-virens** Sacc.
Passiflora sp. Missouri.

456. **Cercospora granuliformis** Ell. & Hol.
Viola var. *cucullata.* Indiana.

457. **Cercospora hydropiperis** (Thüm.) Speg.
Polygonum hydropiper. Illinois, Indiana.

458. **Cercospora ilicis** Ellis.
Ilex glabra. Mississippi.

459. **Cercospora ipomœæ** Wint.
Ipomœa pandurata. Illinois.

460. **Cercospora lippiæ** Ell. & Ever.
*Lippia lanceolata.** Illinois.

461. **Cercospora liriodendri** Ell. & Hark.
Liriodendron tulipifera. Mississippi.

462. **Cercospora maritima** Tracy & Earle.
*Croton maritimus.** Mississippi.

463. **Cercospora microsora** Sacc.
Tilia americana. Illinois, Michigan.

464. **Cercospora mississippiensis** Tracy & Earle.
a. Smilax sp. Mississippi.
b. Smilax bona-nox. Mississippi.

465. **Cercospora moricola** Cke.
Morus rubra. Mississippi.

466. **Cercospora nigricans** Cke.
Cassia marylandica. Missouri.

467. **Cercospora nymphæacea** C. & E.
a. Nymphæa sp. Ohio.
b. Nymphæa odorata? Illinois.

468. **Cercospora oculata** Ell. & Kell.
Vernonia noveboracensis. Indiana.

469. **Cercospora olivacea** (B. & Rav.) Wint.
Gleditschia triacanthos. Illinois, Iowa.

470. **Cercospora oxybaphi** Ell. & Halsted.
Oxybaphus nyctagineus. Illinois.

471. **Cercospora personata** (B. & C.) Ell. & Ever.
Arachis hypogea. Mississippi.

472. **Cercospora pteleæ** Wint.
Ptelea trifoliata. Indiana.

473. **Cercospora pustula** Cke.
Ampelopsis quinquefolia. Virginia.

474. **Cercospora racemosa** Ell. & Mart.
a. Ambrosia trifida. District of Columbia.
b. Teucrium canadense. Indiana, Michigan.

475. **Cercospora resedæ** Fckl.
Reseda odorata. Illinois.

476. **Cercospora rhoina** C. & E.
a. Rhus sp. Mississippi.
b. Rhus aromatica. Missouri.
c. Rhus copallina. Mississippi.
d. Rhus glabra. District of Columbia, Indiana, Missouri.
e. Rhus typhina. District of Columbia.

477. **Cercospora rosicola** Pass.
a. Rosa sp. District of Columbia, Missouri.
*b. Rosa setigera.** Indiana.

478. **Cercospora rubi** Sacc.
a. Rubus sp. Missouri.
b. Rubus canadensis. Maryland.
c. Rubus villosus. Illinois.

479. **Cercospora sagittariæ** Ell. & Kell.
Sagittaria variabilis. Illinois, Texas.

480. **Cercospora sanguinariæ** Pk.
Sanguinaria canadensis. Missouri.

481. **Cercospora saururi** Ell. & Ever.
Saururus cernuus. Illinois, Indiana.

482. **Cercospora sedoides** Ell. & Ever.
Penthorum sedoides.

483. **Cercospora simulata** Ell. & Ever.
Cassia marylandica. Indiana, Missouri.

484. **Cercospora smilacis** Thüm.
a. Smilax sp. Missouri.
b. Smilax glauca. West Virginia.

485. **Cercospora sordida** Sacc.
Tecoma radicans. Illinois, Missouri.

486. **Cercospora squalidula** Pk.
a. Clematis sp. North Dakota.
b. Clematis ligusticifolia. Nebraska.

487. **Cercospora teucrii** Ell. & Kell.
Teucrium canadense. Indiana.

488. **Cercospora umbrata** Ell. & Hol.
Bidens frondosa. Michigan.

489. **Cercospora viticola** (Ces.) Sacc.
a. Vitis sp. District of Columbia, North Carolina, Virginia.
b. Vitis cordifolia. Illinois.

490. **Cercosporella cana** (Pass.) Sacc.
Erigeron annuus. District of Columbia, Indiana.

491. **Cercosporella persica** Sacc.
Prunus persica. Maryland.

492. **Cladosporium carpophilum** Thüm.
Prunus persica. Illinois.

493. **Cladosporium fulvum** Cke.
Lycopersicum esculentum. Maryland, New Jersey.

494. **Cladosporium pæoniæ** Pass.
Pæonia officinalis. District of Columbia.

495. **Cladosporium typharum** Desm.
Typha latifolia. Montana.

496. **Didymaria clematidis** Cke. & Hark.
Clematis ligusticifolia. Montana.

497. **Didymaria ungeri** Cda.
*Ranunculus septentrionalis.** Indiana.

498. **Epicoccum neglectum** Desm.
Tripsacum dactyloides. Mississippi.

499. **Fusarium rubi** Wint.
Rubus villosus. Illinois.

500. **Fusicladium dendriticum** (Wallr.) Fckl.
Pirus malus. Indiana, Kansas, Michigan, Missouri, New York.

501. **Fusicladium pirinum** Fckl.
Pirus communis. Michigan.

502. **Glenospora curtisii** Berk. & Desm.
Nyssa sp.

Helminthosporium fragile Sorokin.
See **Thielavia basicola** Zopf.

503. **Helminthosporium gramineum** Rabh.
Hordeum vulgare. Canada.

504. **Helminthosporium inconspicuum** C. & E.
Zea mays. Illinois, New Jersey.

505. **Helminthosporium ravenelii** M. A. Curtis.
Sporobolus indicus. Mexico.

506. **Helminthosporium turcicum** Pass.
Sorghum vulgare. Kansas.

507. **Isariopsis linderæ** (Ell. & Ever.) Sacc.
Diospyros virginiana? West Virginia.

508. **Macrosporium brassicæ** Berk.
Brassica sp. Alabama.

509. **Macrosporium cookei** Sacc.
Datura sp. Maryland.

510. **Macrosporium parasiticum** Thüm.
Allium cepa. New York.

511. **Macrosporium sarcinæforme** Cav.
Trifolium pratense. Kansas.

512. **Microstroma juglandis** (Bér.) Sacc.
a. Juglans cinerea. New Jersey.
b. Juglans nigra. District of Columbia, Missouri.

513. **Monilia fructigena** Pers.
a. Prunus sp. Maryland.
b. Prunus persica.

514. **Napicladium arundinaceum** (Cda.) Sacc.
Phragmites communis. Nebraska.

515. **Oidium obductum** Ell. & Lang.
a. Quercus alba. Illinois.
b. Quercus imbricaria. California.

516. **Ovularia obliqua** (Cke.) Oud.
Rumex crispus. Maryland, New Jersey.

517. **Periconia pycnospora** Fres.
Yucca sp. Florida.

518. **Piricularia grisea** (Cke.) Sacc.
Setaria sp. Nebraska.

519. **Polythrincium trifolii** Kunze.
Trifolium repens. Indiana, Maryland, Massachusetts, New Jersey.

520. **Ramularia areola** Atk.
Gossypium sp. Mississippi.

521. **Ramularia celastri** Ell. & Mart.
Celastrus scandens. Canada.

522. **Ramularia desmodii** Cke.
Desmodium sp. Illinois, Missouri.

523. **Ramularia diervillæ** Pk.
Diervilla trifida. New Hampshire.

524. **Ramularia gibba** Fckl.
Ranunculus repens. Illinois.

525. **Ramularia hamamelidis** Pk.
a. Hamamelis sp. West Virginia.
b. Hamamelis virginica. Illinois.

526. **Ramularia macrospora** Fres.
Erigeron annuus. New Jersey.

527. **Ramularia parietariæ** Pass.
Parietaria pennsylvanica. Missouri.

528. **Ramularia plantaginis** Ell. & Mart.
Plantago major. Indiana, New Jersey.

529. **Ramularia rudbeckiæ** Pk.
Rudbeckia laciniata. Michigan, West Virginia.

530. **Ramularia rufo-maculans** Pk.
Polygonum acre. Indiana.

Ramularia tulasnei Sacc.
See **Sphærella fragariæ** (Tul.) Sacc.

531. **Ramularia urticæ** Ces.
Urtica gracilis. Illinois.

532. **Ramularia vaccinii** Pk.
Vaccinium pennsylvanicum. District of Columbia.

533. **Ramularia variabilis** Fckl.
Verbascum thapsus. Michigan.

534. **Scolecotrichum graminis** Fckl.
*a. Festuca elatior.** Kansas.
b. Phleum pratense. Indiana.
c. Poa sp. Maryland.
*d. Poa nemoralis.** Indiana.
e. Poa pratensis. Indiana.

535. **Scolecotrichum punctulatum** Tracy & Earle.
Iris pabularia. Mississippi.

536. **Septosporium heterosporum** Ell. & Gal.
Vitis californica. California.

537. **Steirochæte graminicola** (Ces.) Sacc.
Bromus unioloides. Texas.

538. **Stigmina platani** (Fckl.) Sacc.
Platanus occidentalis. Illinois.

539. **Stilbum flavidum** Cke.
*Coffea arabica.** Guatemala.

540. **Tetraploa divergens** Tracy & Earle.
Panicum agrostidiforme. Mississippi.

541. **Tubercularia vulgaris** Tode.
Ficus sp. California.

542. **Ustilaginoidea virens** (Cke.) Tak.
Oryza sativa. Japan.

543. **Volutella dianthi** (Hal.) Atk.
*Dianthus caryophyllus.** District of Columbia.

BULLETINS OF THE BUREAU OF PLANT INDUSTRY.

The Bureau of Plant Industry, which was organized July 1, 1901, includes Vegetable Pathological and Physiological Investigations, Botanical Investigations and Experiments, Grass and Forage Plant Investigations, Pomological Investigations, and Gardens and Grounds, all of which were formerly independent Divisions, and also Seed and Plant Introduction, The Arlington Experimental Farm, Tea Investigations and Experiments, and the Congressional Seed Distribution. Beginning with the date of the organization of the Bureau, the independent series of bulletins of the Division of Vegetable Pathology and Physiology, the last number of which was 29, and also of each of the other divisions, were discontinued and all are now published as one series of the Bureau.

The bulletins published in this series are:

No. 1. The Relation of Lime and Magnesia to Plant Growth, 1901.
2. Spermatogenesis and Fecundation of Zamia, 1901.
3. Macaroni Wheats, 1901.
4. Range Improvement in Arizona, 1901.
5. Inventory No. 9, Seeds and Plants Imported, 4351–5500, 1901.
6. A List of American Varieties of Peppers, 1901.
7. The Algerian Durum Wheats: A Classified List, with Descriptions, 1901.

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